Appl. No. 10/604,244
Amdt. dated December 7, 2004
Reply to Office action of September 10, 2004

REMARKS/ARGUMENTS

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by "Data Mining and Fault Diagnosis Based on Wafer Acceptance Test Data and In-line Manufacturing Data", Fan et al. (referred hereafter Fan et al.).

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Response to the rejection of claims 1-16 under 35 U.S.C. 102(b):

The Applicant intends to point out the difference between claim 1 of the present application and Fan et al.'s disclosure. Claim 1 of the present
10 application is repeated below for convenience:

Claim 1 (original): A method for analyzing in-line quality control (QC) test parameters, the method being used to analyze a plurality of lots of products, each lot of products comprising a lot number, the products being formed
15 using a plurality of equipments, at least one wafer of each lot of products being tested by at least one in-line QC test item to generate an in-line QC test parameter, the in-line QC test item, and its sample test item and wafer test item being stored in a database, the database further storing the in-line QC test parameter and data of a plurality of lots of high-yield product
20 stocks, such as test items and test parameters, the method comprising:
analyzing the in-line QC test parameter to determine whether the in-line QC test parameter corresponds to a predetermined spec or not;
searching the database to find out the sample test item or the wafer test item related to the in-line QC test item when the in-line QC test parameter
25 does not correspond to the predetermined spec;
searching the database to find out the corresponding test parameters of the high-yield product stocks according to the in-line QC test item and the searched sample test item or the wafer test item; and

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generating a correlation to illustrate the relationship between the in-line QC test item and the sample test item, or the relationship between the in-line QC test item and the wafer test item according to the searched
5   high-yield product stocks.

According to the method disclosed in claim 1, test parameters of the high-yield product stocks are used to generate the correlation between the in-line QC test item and the sample test item or the wafer test item. Fan et
10   al. teaches a method of data mining and fault diagnosis based on wafer acceptance test data and in-line manufacturing data, which including to form a decision tree to provide an easy comparison among the equipment effects (Fig. 3, and page 172, FAB DATA CASE STUDY section, lines 11-13). However, Fan et al. never mentions any test parameters of
15   high-yield product stocks nor teaches the concept of generating the correlation between the in-line QC test item and the sample test item, or the correlation between the in-line QC test item and the wafer test item according to the searched high-yield product stocks. Therefore, the Applicant believes that claim 1 of the present applicant is absolutely
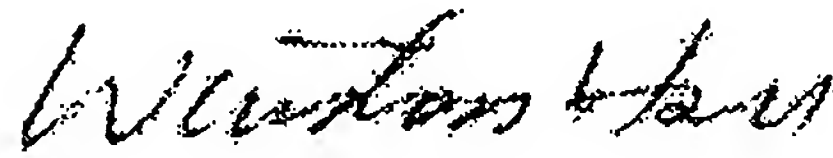20   different from Fan et al.'s disclosure. Reconsideration of claim 1 is politely requested.

As claims 2-16 are dependent upon claim 1, they should be allowed if claim 1 is allowed. Reconsideration of claims 2-16 is therefore requested.
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Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

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Sincerely yours,

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Winston Hsu, Patent Agent No. 41,526

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

10 Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

(Please contact me by voice mail if you need a telephone communication.)

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